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# ISM/Safety Improvement Project Status

Steven Coleman

March 29, 2007

# ISM/Safety Improvement Project Update

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- Project is 74% complete – March 29, 2007
- Major Activities Implemented/Completed
  - Senior Management R2A2s and performance plans/personal goals to reflect strategy and execution
  - Verification of Legacy Document Content in SBMS
  - Construction Safety Subject Area Review/Update
  - Worker Safety and Health Program Description – Forwarded to DOE BHSO for review and approval
  - Price Anderson Amendment Act (PAAA) Program description/subject area revised to include WS&H process.

# Emerging Issues/Concerns

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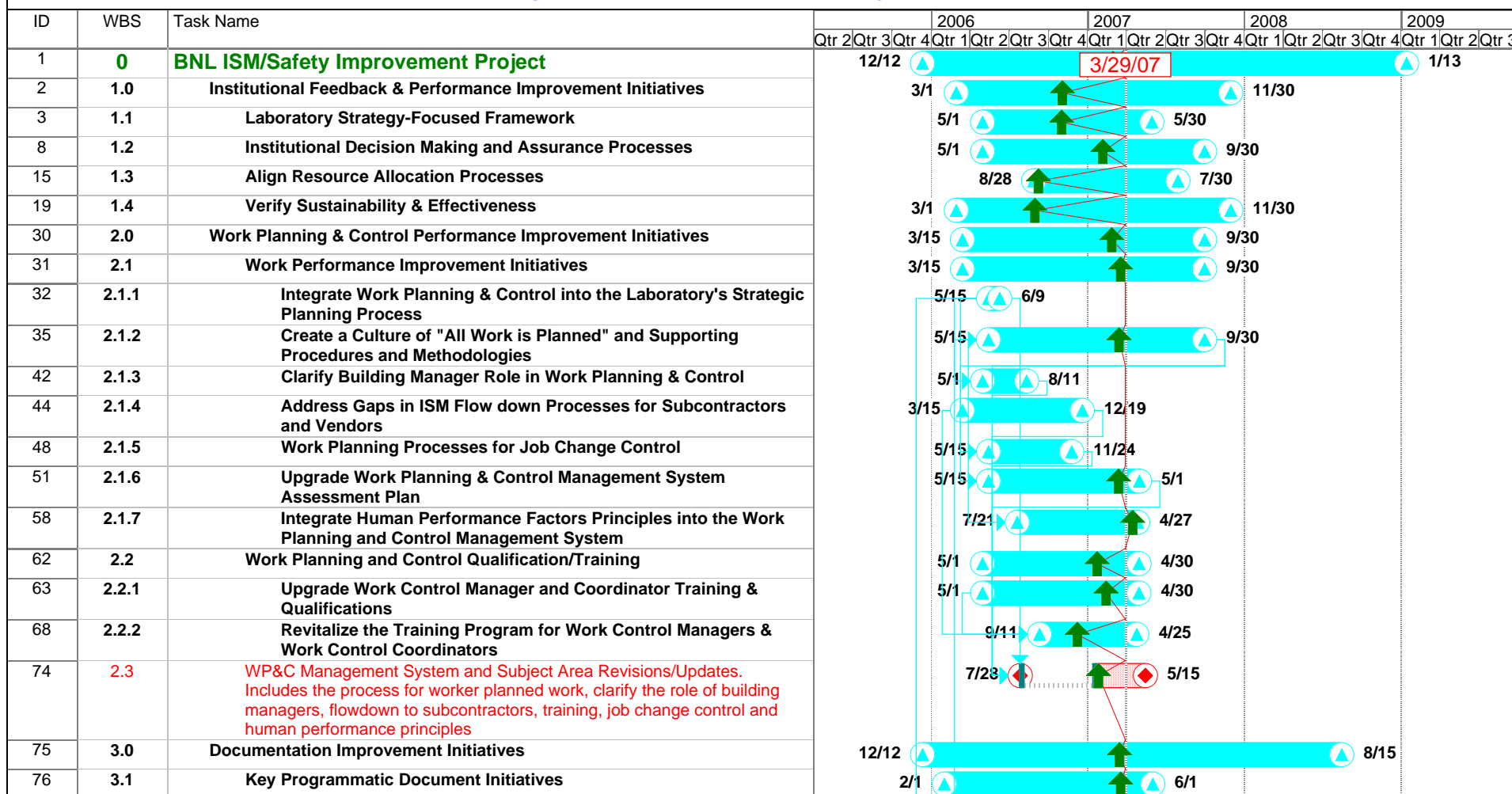
- Work Planning and Control for Operations formal and structured process for all modes of work.
  - Integration of Job/Facility Risk Assessments (JRAs/FRAs)
  - Training & Qualifications
- Nuclear Safety Management
  - Authorization Basis Documents
- Conduct of Operations Program

# Critical Activities – Achieve Favorable Outcome

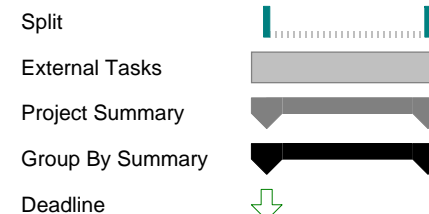
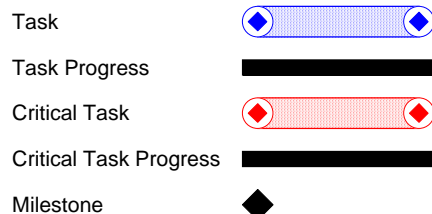
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- Scoping Visit Agenda & Presentation – May 1, 2007
- Feedback and Improvement (PAAA - [NTS] driven) – July 30, 2007
  - Strategy Focused Frame for Lab-wide planning, decision, and performance management
  - Align Resource Allocation Processes with Laboratory Performance Objectives
- Work Planning and Control -
  - Work Planning & Control institutional framework established (worker planned, pre-planned, permit planned, & integration of job/facility risk assessments) and formally documented – May 1, 2007
  - Training & Qualification requirements implemented – June 1, 2007
  - WP&C Implementation Workshops – July 30, 2007
- Nuclear Safety Management – June 1, 2007
  - Third Party Assessment completed and a robust, responsive corrective action plan in place.
- Requirements Verification - July 1, 2007
  - At a minimum, 10 CFR 851 (Worker Safety & Health Rule), Emergency Management & ISM Related Management Systems
- Communications – Workforce Preparation
- Emergency Management?

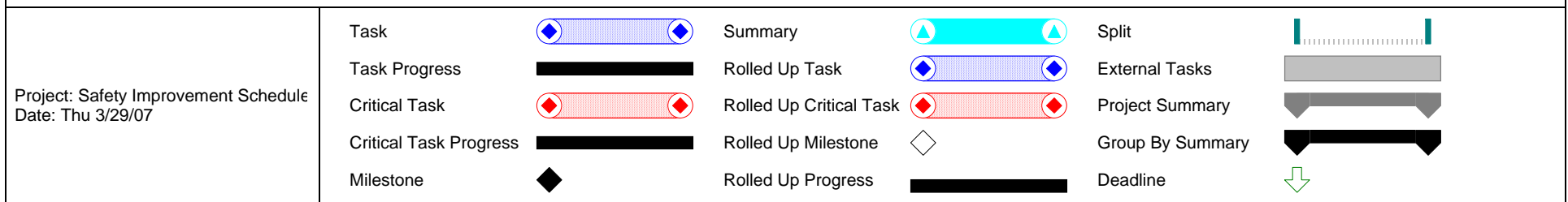
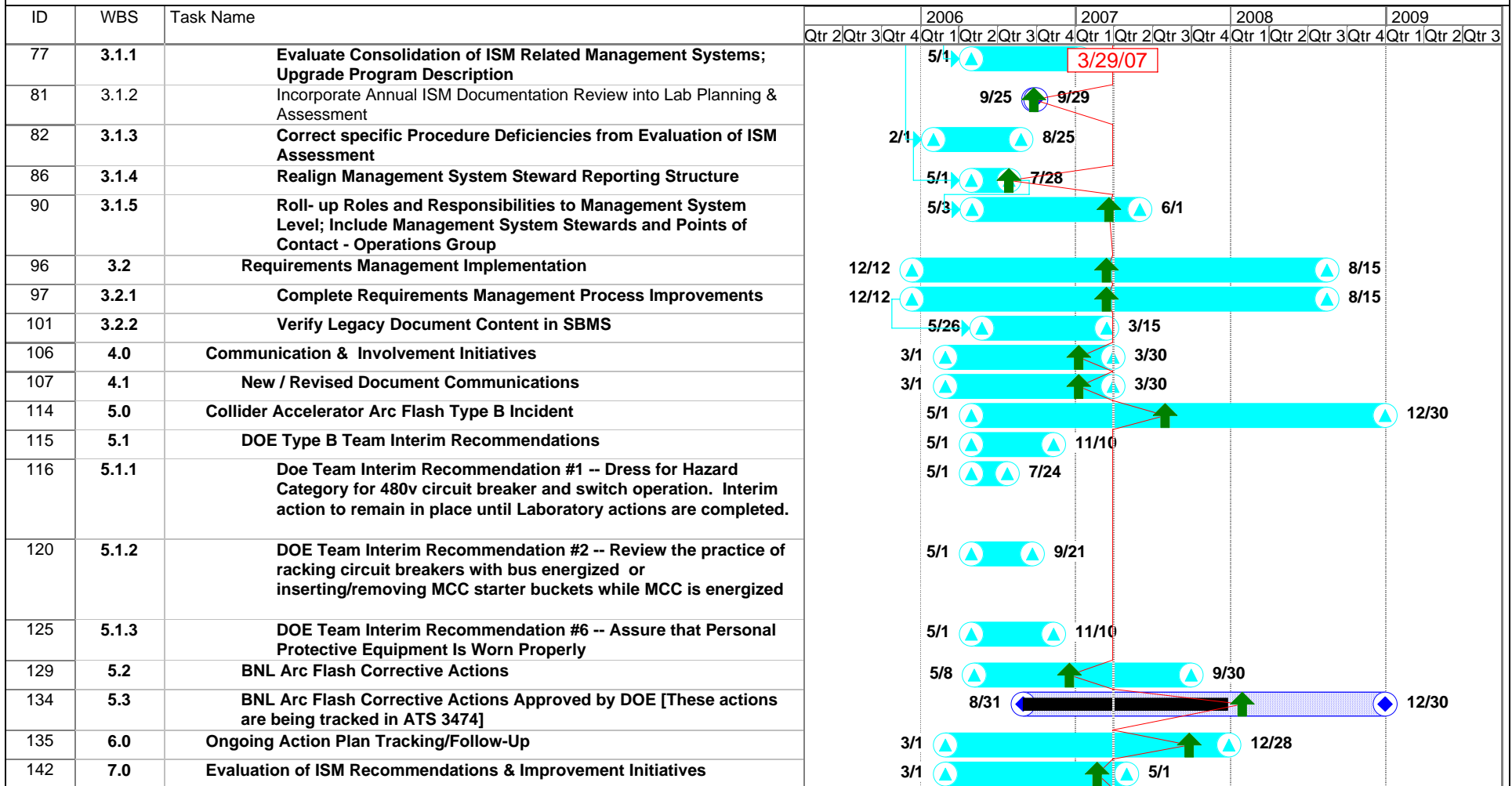
# BNL ISM/Safety Improvement Project Plan (ATS# 2944)



Project: Safety Improvement Schedule  
Date: Thu 3/29/07



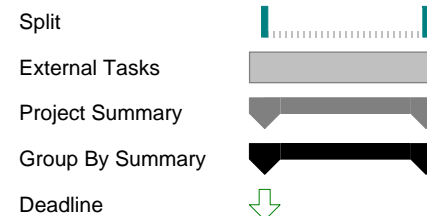
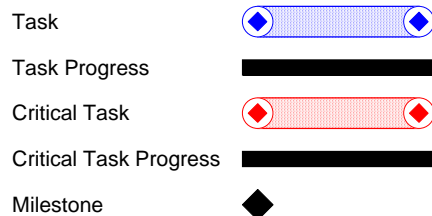
# BNL ISM/Safety Improvement Project Plan (ATS# 2944)



# BNL ISM/Safety Improvement Project Plan (ATS# 2944)

ID	WBS	Task Name	2006				2007				2008				2009						
			Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
143	7.1	Evaluation of ISM Recommendations/Opportunities for Improvement			3/1					3/29/07	1										
168	7.2	Worker Safety & Health Program Implementation			5/1							4/30									
169	7.2.1	Worker Safety & Health Rule Implementation			5/1							4/30									
175	7.3	Safety Improvement Initiatives			3/31							5/1									
185	8.0	Project Management and Support			5/1															1/13	

Project: Safety Improvement Schedule  
Date: Thu 3/29/07



# Brookhaven National Laboratory

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## ISM/Safety Improvement Project Review Meeting

### WBS 1.0 Institutional Feedback and Performance Improvement Initiatives

Pat Looney  
March 29, 2007



# WBS 1.0 Institutional Feedback and Performance Improvement Initiatives

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Summary Status –  Scope  Cost  Schedule

- Performance Reporting Improvements (WBS1.2) ~ 85% Complete
- Tools for identify emerging risks and aid prioritization. (WBS 1.2) 100% Complete
- BNL business planning process: The objectives and approach are fairly well understood, but lack specificity.
- Interfaces for flow of performance information, particularly between the organizational units and the institutional need to further consideration and clarification.
- We need to look closely at Assessments Management and Ownership in the next one or two months.

# WBS 1.1 Laboratory Strategy Focused Framework

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Activity Status –  Scope  Cost  Schedule

## ■ Progress/Description of Work Completed

- ALP published **Completed**
- Publish Planning Calendar **Completed**
- Realignment of quarterly reporting along SFA's expected first quarter FY07. **Completed (Significant Changes to the Reporting Process need to be documented)**
- Implementation of Management Symposium: Laboratory has engaged Allen Robinson to potentially develop management symposia similar to DDO pilot. **(10% Complete?)**

## ■ Emerging Risks/Issues:

- Schedule may slip on #4 – depends on resources and ability to stand this up.

## ■ Estimated Completion Date: Q4 FY07

## ■ Proposed Revisions to the Project Plan: None

# WBS 1.2 Institutional Decision Making and Assurance Processes

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Activity Status – ● Scope ● Cost ● Schedule

■ Progress/Description of Work Completed

- Institutional Prioritization Framework **Complete**
- PerformanceSoft deployment on schedule. Initial feedback indicates the potential for strong institutional acceptance – issues with report generation and customization may limit usefulness and hence site-wide data collection.

■ Emerging Risks/Issues:

- Target date for Establishing Common Institutional Level Data Collection and Reporting Process and Tool is now. Do we need to extend?
  - Issues: PerformanceSoft, Synchronization of Reporting across the Lab and with BSA Board.

■ Estimated Completion Date: Q2 FY07

■ Proposed Revisions to the Project Plan:

Do we need to consider extending the date for “Establish site-wide institutional-level data collection and reporting process and tool?”

# WBS 1.3 Align Resource Allocation Processes

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Activity Status –       Scope       Cost       Schedule

■ Progress/Description of Work Completed

- Good progress on refining institutional level discretionary process allocation process.
  - Risk Templates and materials for FY07 budget allocation hearings for supplemental requests (April 9) are a significant improvement.

■ Emerging Risks/Issues:

- Improved business planning processes, particularly at the organizational level will be a significant undertaking. The objectives and approach are understood, but lack specifics.

■ Estimated Completion Date: Q4 FY07

■ Proposed Revisions to the Project Plan: None

# WBS 1.4 Verify Sustainability and Effectiveness

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Activity Status –  Scope  Cost  Schedule

- Progress/Description of Work Completed

- Senior management R2A2s; **completed**
  - Specifically for feedback and improvement activities, have been reviewed and updated.
  - Senior management goals for strategy execution have been defined in the ALP.

- Emerging Risks/Issues: None

- Estimated Completion Date: Q1 FY08

- Proposed Revisions to the Project Plan: None

# Brookhaven National Laboratory

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ISM/Safety Improvement  
Project Review Meeting

## **WBS 2.0 Work Planning and Control Performance Improvement**

March 29, 2007

# WBS 2.0 Work Planning and Control Performance Improvement

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WBS Summary Status –       Scope       Cost       Schedule

- Overall 78% of the Work Planning and Control Improvement Initiatives are complete. Project activities associated with this WBS element are slightly behind schedule. Progress on the following WBS elements has been slower than planned: WBS 2.1.2 – Create a Culture of “All work is Planned” and supporting procedures and methodologies, WBS 2.2.2 – Revitalize the Training Program for work control managers and coordinators, and WBS 2.3 – WP&C Management System and Subject Area revisions.
- WP&C Management System Requirements Verifications were completed
- Established minimum training & qualification (T&Q) requirements for WCMc/WCCs. Draft Experimental Safety Review Coordinator T&Q are being developed
- A Draft re-write (straw man) of the WP&C subject area (Operations section) was developed. A subject area development team was established, and will meet to finalize the institutional framework for WP&C. (Expected to be completed by May 30, 2007)
- Oak Ridge National Laboratory gave an overview of their Electronic Experimental Safety Review process (not as comprehensive as BNL’s existing process, and may not fit in well with BNL).
- WP&C Training Program is being updated/revised to follow the ISM Core Function Framework. Met several times with the Training and Qualification Office.

## WBS 2.1.2 - Create a culture of “all work is planned” and supporting procedures and methodologies

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Activity Status –      Y Scope      G Cost      Y Schedule

### ■ Progress/Description of Work Completed – 76%

- Defined the worker planned process and other work planning and control modes [worker planned, pre-planned, permit planned]. The DRAFT framework was completed. The framework will be reviewed, scrutinized and enhanced by the subject area development team and will occur in three phases (Phase 1&2 WP&C Operations Section, Phase 3 Experimental Safety Review section)

### ■ Emerging Risks/Issues:

- Failure to meet Performance Evaluation and Measurement Plan (PEMP) 5.2.1.1 & 2 targets
- HS-64 ES&H Evaluation – Significant Weakness Rating and failure to achieve a favorable outcome from the review.

### ■ Estimated Completion Date: June 1, 2007


### ■ Proposed Revisions to the Project Plan:

Update the project plan to show a completion date of June 1, 2007



## WBS 2.1.6 – Upgrade Work Planning and Control Management System Assessment Plan

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Activity Status –       Scope       Cost       Schedule

### ■ Progress/Description of Work Completed – 85%

- Success factors, risk limits quantitative measures and reporting against measures will be captured in the Operations Integrated Assessment and Business planning processes. The process includes identifying key functions, institutional risk, frequency/methods of review/assessment/monitoring, methods of review and success factors *[implementation expected 3<sup>rd</sup> quarter]*.
- The quarterly work control managers meetings are now formal and will serve as continuing training. This activity will be closed when this requirement is incorporated in the management system and subject area have been updated.
- Update of the assessment tool will coincide with the Operations Integrated/Business Process

### ■ Emerging Risks/Issues:

None


### ■ Estimated Completion Date: 3<sup>rd</sup> Quarter FY 2007

### ■ Proposed Revisions to the Project Plan:

None

## WBS 2.1.7 – Integrate Human Performance Factors Principles into the Work Planning and Control Management System

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Activity Status –       Scope       Cost       Schedule

### ■ Progress/Description of Work Completed – 96%

- Elements of human performance have been included in the draft re-write of the WP&C subject area. With the completion of the management system and subject area overhaul the enhanced work control process will include error precursors in the hazard analysis process  
*[Note: as part of the human performance strategy and implementation white paper, a formal and structured process is being considered]*

### ■ Emerging Risks/Issues:

- Failure to meet Performance Evaluation and Measurement Plan (PEMP) 5.2.1.1 & 2 targets
- HS-64 ES&H Evaluation – Significant Weakness Rating and failure to achieve a favorable outcome from the review.

### ■ Estimated Completion Date: June 1, 2007 in sync with WBS 2.1.2 & 2.3

### ■ Proposed Revisions to the Project Plan:

None

## WBS 2.2.1 – Upgrade Work Control Manager and Coordinator Training & Qualifications


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Activity Status –       Scope       Cost       Schedule

- **Progress/Description of Work Completed – 86%**
  - Draft selection, training and qualification guidelines are included in the subject area re-write. The new requirements will be rolled out with the enhanced WP&C subject area.
- **Emerging Risks/Issues:**
  - Failure to meet Performance Evaluation and Measurement Plan (PEMP) 5.2.1.3 target
  - Failure to implement in a timely manner will cause BNL to receive an unfavorable outcome from the HS-64 ES&H evaluation.
- **Estimated Completion Date:** June 1, 2007
- **Proposed Revisions to the Project Plan:**  
Update deliverable completion date to June 1, 2007

## WBS 2.2.2 – Revitalize the Training Program for Work Control Managers/Coordinators

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Activity Status –       Scope       Cost       Schedule

- **Progress/Description of Work Completed – 38%**
  - There were several meetings held with the Training and Qualification Office to discuss the course format and expectations. WP&C Training Program will and is being updated/revised to follow the ISM Core Function Framework.
- **Emerging Risks/Issues:**
  - Failure to meet Performance Evaluation and Measurement Plan (PEMP) 5.2.1.3 target
  - Failure to implement in a timely manner will cause BNL to receive an unfavorable outcome from the HS-64 ES&H evaluation.
- **Estimated Completion Date:** June 1, 2007
- **Proposed Revisions to the Project Plan:**  
Update the project plan to reflect a deliverable due date June 1, 2007

## WBS 2.3 – WP&C Management System and Subject Areas Revisions/Updates

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Activity Status –       Scope       Cost       Schedule

### ■ Progress/Description of Work Completed – 14%

- A Draft re-write (straw man) of the WP&C subject area (Operations section) was developed.
- Met with Occupational Medicine to discuss Work Permit Use and Changes. The Work Permit form was revised and will be included in the upcoming revision.
- Enhancements to the Experimental Safety Review (ESR) forms in progress. Incorporate new hazards (i.e. nanotechnology, human performance questions, and provided easy linkage to subject matter experts).

### ■ Emerging Risks/Issues:

- Failure to meet Performance Evaluation and Measurement Plan (PEMP) 5.2.1.1 & 3 [skill of the worker clarification and integration of JRAs/FRAs] targets
- Failure to implement in a timely manner will cause BNL to receive an unfavorable outcome from the HS-64 ES&H evaluation.

### ■ Estimated Completion Date: July 1, 2007

### ■ Proposed Revisions to the Project Plan:

Update the project plan to reflect a deliverable due date July 1, 2007

# ISM/Safety Improvement Project Review



WBS 1.0 Feedback and Improvement (*Partial*)

WBS 3.0 Documentation Initiatives

WBS 4.0 Communication & Involvement Initiatives (*Partial*)

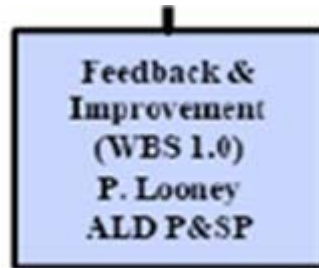
32 Actions in ISM/SIP Plan

221 Actions in QMO Project Support Plan

Roy Lebel

March 29, 2007

# ISM/Safety Improvement Project Review



## WBS 1.0 Feedback and Improvement (*Partial*)

		Total Actions Completed (As of 3/29)	Actions this Period (Since 2/13)
<b>WBS 1.0</b>	Total Actions		
ISM/SIP Plan	6	5	1
QMO	65	63	

# WBS 1.2.6 Establish Common Institutional Level Data Collection and Reporting Process

Scope	Cost	Schedule
Green	Green	Green

## Progress/Description of Work Completed:

- To support the alignment of the PEMP and MS with the SFAs, PB Views (Performance Soft) was purchased to be used as the institutional level data collection reporting business system
- ALP/PEMP/MS metrics were loaded into the database
- Customized books were created for the ALP, PEMP, MSs, DDO, ESH&Q Directorate, F&O Directorate, and Finance Directorate
- Piloted Performance Soft with the ESH&Q Directorate for the datacall – worked well
- Corporate risk measures for 3 of the 4 risk packages need to be added to Performance Soft
- ❖ Working with Performance Soft to provide enhanced electronic reports (that match First Period Performance Summaries provide to the Policy Council)
- ❖ System/process need to be rolled-out to the remainder of the institution

## Emerging Risks/Issues:

- ❖ Need enhanced Performance Report function (\$ TBD)
- ❖ BNL owns licenses for the Policy Council and ESH&Q Directorate, licenses are needed for Stewards/POCs/SMEs for full implementation (~ \$17K)

## Corrective Action(s):

- None

## Proposed Revision(s) to the Project Plan:

- Follow-up actions will be tracked outside the ISM/SIP Plan

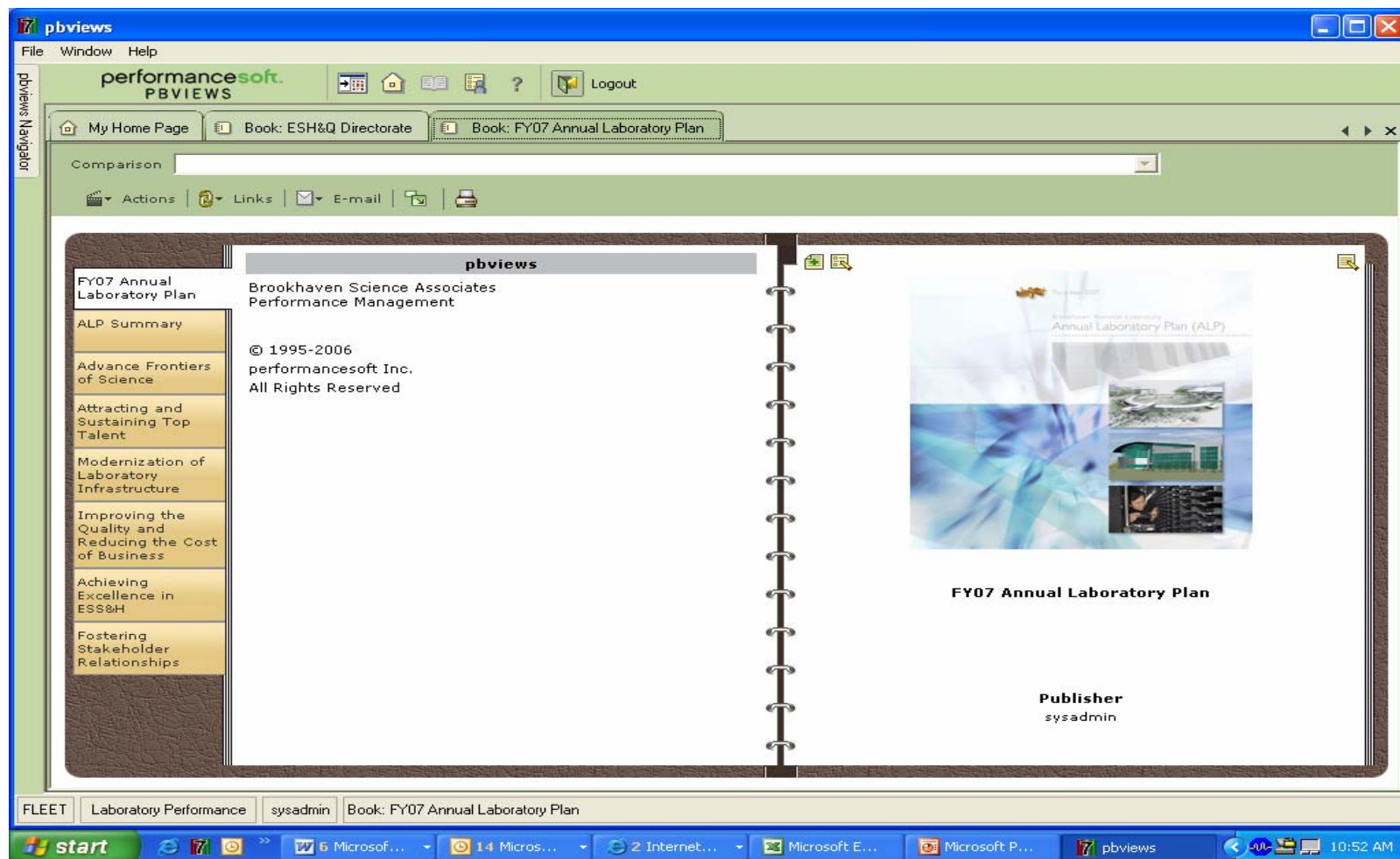
% Complete: 95%

Previous % Complete: 65%

Completion Date: 3/30/07



# WBS 1.2.6 Establish Common Institutional Level Data Collection and Reporting Process



# WBS 1.2.6 Establish Common Institutional Level Data Collection and Reporting Process

The screenshot displays the pbviews web application interface. The top navigation bar includes 'File', 'Window', and 'Help' menus, along with a 'Logout' button. Below this, a breadcrumb trail shows 'My Home Page' > 'Book: ESH&Q Directorate' > 'Book: FY07 Annual Laboratory Plan'. The main content area is titled 'Comparison: Actual vs. Target' and 'Period: 2006/Q4'. A left sidebar lists various organizational units, including 'ESH&Q Directorate', 'ALP: Achieving Excellence in ESS&H', 'PEMP: Goal 4-8 Objective Level ESH&Q', 'PEMP: Goal 4-8 Target Level ESH&Q', 'MS: Environment, Safety, and Health Protection Fcn Area', 'ESH&Q ALD Measure Entry', 'Environmental & Waste Management Services Division', 'Quality Management Office', 'Radiological Control Division', and 'Safety & Health Services Division'. The main panel shows a table for 'Quality Management Office' with columns for 'HU Performance Strategy' and 'DO'. The table lists several performance metrics, including '5.2.1.5 Verify ISM CAs', '6.4 IA&O, Quality, Informal', '6.4.1.2 QAP 3rd Party', 'Integ Assess Prog MS', 'Quality MS', and 'SBMS MS', all with 'DO' values. A 'Links' section below the table provides links to 'QMO Homepage' and 'Performance Definitions'. On the right, a 'Summary' tab is active, showing 'HU Performance Strategy (DO)' with a 'Description' of the 'Annual Laboratory Plan - Achieving Excellence in ESS&H' and an 'Owner Commentary' dated '2006/Q4' detailing an 'Issue & Decision Paper (I&DP)' and training activities.

Quality Management Office	HU Performance Strategy	DO
	HU Performance Strategy	DO
	5.2.1.5 Verify ISM CAs	DO
	6.4 IA&O, Quality, Informal	DO
	6.4.1.2 QAP 3rd Party	DO
	Integ Assess Prog MS	DO
	Quality MS	DO
	SBMS MS	DO

**Links**

- QMO Homepage
- Performance Definitions

**Summary** | Data Chart | Data Table | Direct Data Entry | Commentary

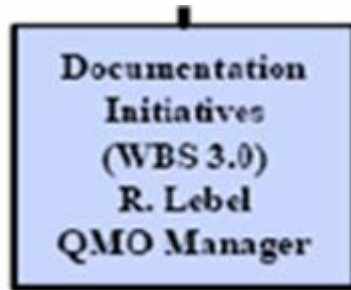
### HU Performance Strategy (DO)

**Description**  
Annual Laboratory Plan - Achieving Excellence in ESS&H  
Target: Develop Human Performance Initiative strategy and internal communications and stakeholder engagement plan

**Owner Commentary**  
**2006/Q4**  
An Issue & Decision Paper (I&DP) was drafted. It outlines BNL's need to achieve a step change in safety and work performance and the benefits of Human Performance Improvement (HPI). The I&DP provides an approach for deploying HPI for management's consideration and decision, and it will be submitted to the LD and DDO.  
Wilke, Jessica, Wednesday, January 10, 2007  
In Nov, Causal Analysis training with a HU twist was conducted by Doe headquarters Lebel, Roy, Wednesday, January 10, 2007

FLEET | Laboratory Performance | sysadmin | Done

# ISM/Safety Improvement Project Review



## WBS 3.0 Documentation Initiatives

		Total Actions Completed (As of 3/29)	Actions This Period (Since 2/13)
<b>WBS 3.0</b>	Total Actions		
ISM/SIP Plan	18	11	2
QMO	107	53	

## WBS 3.1.5 Roll-Up Roles and Responsibilities to Management System Level; Include Management System Stewards and Points of Contact - Operations Group

Scope	Cost	Schedule
Green	Green	Yellow

### Progress/Description of Work Completed:

- ❖ Schedule went from red to yellow
- ❖ Since DDO reissued memo, 16 of 17 Operations MSD drafts have been submitted. Five have been published. Contacted POC on submittal date for last MSD.
- ❖ Completion date for publishing updated MSD's is 6/1/07.
- ❖ Working closely with HR (B. Kelly).

### Emerging Risks/Issues:

- Last MSD submittal date TBD.
- POC's performing timely document reviews and approvals

## **WBS 3.1.5 Roll-Up Roles and Responsibilities to Management System Level; Include Management System Stewards and Points of Contact – Operations Group (cont.)**

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### **Corrective Action(s):**

- Working with POC's to expedite the review and publishing process.

### **Proposed Revision(s) to the Project Plan:**

- Establish phase 2 to capture roll up of roles & responsibilities for the other 12 MSD's.

**% Complete: 29% (5 of 17 MSD's published)**

**Previous % Complete: 23% (4 of 17 MSD drafts submitted)**

**Estimated Completion Date: 06/1/07**

## WBS 3.2.1 Requirements Management Process Improvements

Scope	Cost	Schedule
Green	Green	Red

### Progress/Description of Work Completed:

*(The plan for requirements management process improvements includes 3 phases)*

#### Phase 1 - Requirements Verification

- Continue to work with Stewards and POCs to facilitate Requirements Verification
- ❖ Met with Laboratory Director and MS Stewards & POCs for high priority Management Systems (3/12)
- ❖ Significant progress made since last ISM Review (2/13)

#### Phase 2 - Test, Modify, and Roll-out Electronic Requirements Tool

- ❖ Task Remaining – Meet with Stewards and POCs regarding new process and tool  
(Current focus is on Phase 1 - Verification)

#### Phase 3 - Contract Mapping

- Continue to restructure the contract clause matrix developed by the Finance Directorate

## WBS 3.2.1 Requirements Management Process Improvements (cont.)

### Emerging Risks/Issues:

- The target completion date for the verification is in jeopardy

### Corrective Action(s):

- Must revisit progress and determine new target completion date

### Proposed Revision(s) to the Project Plan:

- ISM completion date of 4/27 is in jeopardy based on past performance (although progress has been made).  
Recommend new date of 6/15?

% Complete: 64%

Previous % Complete: 31%

Estimated Completion Date: 08/08



# Requirements Verification Report

System Champion: Samuel Aronson

## Steward: Gregory Fess

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Legal	2/28/2007	96%	50%	24	4	1	2

## Steward: John Hauser

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Financial Management	2/28/2007	100%	100%	19	10	0	0

## Steward: William Hempfling

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Human Resources *	10/23/2006	70%	40%	40	5	12	3
Occupational Medicine *	1/31/2007	100%	100%	4	15	0	2
Training and Qualifications *	1/31/2007	100%	100%	1	4	0	0

## Steward: Pat Looney

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Intellectual Property	2/28/2007	100%	100%	8	2	0	0
Integrated Planning *	1/31/2007	N/A	100%	0	4	0	0
Work for Others	2/28/2007	100%	100%	3	1	0	0

## Steward: Margaret Lynch

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Communications, Government, Community Relations and Education	3/30/2007	0%	0%	1	9	1	9



# Requirements Verification Report

System Champion: Michael Bebon

## Steward: Michael Bebon

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Acquisition Management	9/29/2006 (PILOT)	75%	86%	32	36	8	5
Property Management	9/29/2006 (PILOT)	33%	0%	6	25	4	25
Work Planning and Control *	11/27/2006	100%	80%	1	15	0	3

## Steward: Andrew McNerney

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Administrative Support	3/30/2007	100%	0%	13	3	0	3
Emergency Preparedness *	12/29/2006	100%	71%	4	7	0	2
Emergency Response *	12/29/2006	50%	80%	2	5	1	1
Facility Operations	11/27/2006	100%	29%	3	7	0	5
Real Property Asset Management	3/30/2007	71%	53%	14	17	4	8
Security	1/31/2007	100%	100%	32	6	0	0

## Steward: James Tarpinian

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Environmental Management	11/27/2006	98%	85%	82	13	2	2
Facility Safety *	10/23/2006	92%	94%	12	18	1	1
Hazardous Material Transportation Safety	12/29/2006	100%	100%	27	5	0	0
Integrated Assessment *	10/23/2006	100%	82%	7	11	0	2
Quality Management *	10/23/2006	100%	89%	4	9	0	1
Radiological Control *	10/23/2006	67%	96%	6	25	2	1
Standards-Based Management System	12/29/2006	100%	100%	5	3	0	0
Worker Safety and Health *	10/23/2006	93%	63%	42	16	3	6

Brookhaven Science Association  
U.S. Department of Energy

Legend	No Issues	Pending Resolution	Concerns/ Past Due
* designates an ISM Priority			

**BROOKHAVEN**  
NATIONAL LABORATORY

# Requirements Verification Report

System Champion: Peter Bond

## Steward: Peter Bond

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Records Management	3/30/2007	12%	17%	17	12	15	10
Science and Technology	3/30/2007	100%	90%	15	10	0	1

## Steward: Tom Schlagel

Management System	Due Date	Percentage Completed		Total		To be Completed	
		Primary	Parsed	Primary	Parsed	Primary	Parsed
Information Resource Management	3/30/2007	94%	100%	17	2	1	0

Legend	No Issues	Pending Resolution	Concerns/ Past Due
* designates an ISM Priority			

# ISM/Safety Improvement Project Review



## WBS 4.0 Communication & Involvement Initiatives (Partial)

		Total Actions Completed (As of 2/13)	Actions This Period (Since 12/21)
WBS 4.0	Total Actions		
ISM/SIP Plan	3	1	2
QMO	12	10	

## WBS 4.1.3 Operations Forum Evaluation and Implementation

Scope	Cost	Schedule
Green	Green	Green

### Progress/Description of Work Completed:

- The latest Forum was held on 12/6/06. At the conclusion of the meeting, the DDO was presented with several key concerns of the forum.

### Emerging Risks/Issues:

- The Ops Management Forum has not met since December 06.
- Documentation of the last meeting has not been published.

### Corrective Action(s):

- The DDO, Ops Mgt Forum Chair and Vice Chair should convene the Forum to review latest operations information and current needs.

### Proposed Revision(s) to the Project Plan:

- None

% Complete: 98% (Pending publication of December meeting minutes)

Previous % Complete: 98%

Estimated Completion Date: 2/15/07 – missed

# WBS 4.1.6 Human Performance Strategy and Implementation Plan Development

Scope	Cost	Schedule
Green	Yellow	Green

## Progress/Description of Work Completed:

- ❖ The QMO completed an Issue & Decision Paper which discusses the need for and benefits of implementing HPI at BNL. It includes a recommended implementation plan. The paper was submitted to Senior Management on 1/23/07.
- ❖ Have worked with DOE –HSS to establish a “scoping visit” April 10-12. E. Carnes and M. Schoener (DOE) and R. Fisher (Consultant) to meet with BSA and BHSO managers to help BNL determine a path forward, utilizing both DOE and BSA resources.
- ❖ Visit will include HPI Fundamentals training for approx 30 people (DOE and BSA)
- ❖ BNL White Paper will be revised to reflect the outcome of this visit (the deliverable for this WBS)
- ❖ Beginning to plan a workshop, “ HPI In Research” to take place this fall at BNL for all DOE Science Laboratories

## Emerging Risks/Issues:

- Rate of implementation will depend on final budget allocation

## Corrective Action(s):

- None at this time

## Proposed Revision(s) to the Project Plan:

- May propose to revise ISM Project Plan to reflect a “Go / No Go” decision

% Complete: 98%

Previous % Complete: 98%

Estimated Completion Date: 4/30/07

# Brookhaven National Laboratory

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ISM/Safety Improvement  
Project Review Meeting

**WBS 6.0 Ongoing Action Plan  
Tracking/Follow-Up**

March 29, 2007

# WBS 6.0 Ongoing Action Plan Tracking/Follow-Up

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WBS Summary Status –  Scope  Cost  Schedule

- Overall 87% of activities identified in other ISM related action plans are complete. There are a total of four open action items for all open corrective action plans. Safety and Health Services Division met with BHSO to discuss the path forward with this activity. BHSO communicated that the subcontracted work scope and schedule will have to be reviewed and approved before they approve the closure of this activity. The work scope and schedule are expected to be completed 4/30/2007.
  - ATS 2823.3.7 – BSA/BHSO to Review Policy Council Decision. The scheduled due date was 3/31/2006. All other open action items are progressing as scheduled.

## WBS 6.2 Material Handling and Rigging Plan (ATS 1948)

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Activity Status –  Scope  Cost  Schedule


- **Progress/Description of Work Completed – 99%**
  - 44 of the 45 corrective actions in ATS 1948 are complete. The remaining action is to assess the effectiveness of corrective actions.
- **Emerging Risks/Issues:**
  - Concerns/issues associated with incidental material handling. Incidents continue to occur
- **Estimated Completion Date:**
  - 06/30/2007 – Last action item is to perform an effectiveness review of material handling corrective actions
- **Proposed Revisions to the Project Plan:**

None



## WBS 6.3 Industrial Hygiene Plan (ATS 2823)

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Activity Status –  Scope  Cost  Schedule

■ **Progress/Description of Work Completed – 99%**

- Industrial Hygiene (IH) Baseline monitoring plan was developed as part of the 10 CFR 851 Gap Analysis corrective action plan.
- BHSO communicated that the subcontracted work scope and schedule will have to be reviewed and approved before they approve the closure of this activity. The work scope and schedule are expected to be completed 4/30/2007
- Policy Council approved \$200K provisional funding for IH Monitoring.

■ **Emerging Risks/Issues:**

None

■ **Estimated Completion Date:** April 30, 2007

■ **Proposed Revisions to the Project Plan:**

None

## WBS 6.4 Electrical Safety Action Plan (ATS 2725)

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Activity Status –  Scope  Cost  Schedule

- **Progress/Description of Work Completed – 95%**

- Generic Arc Flash Labels are actively being affixed to electrical distribution equipment. Generic labeling of panels is expected to be completed by December 2007. As Arc Flash Calculations are completed they will replace the generic labels. Over 25,000 labels affixed. [ATS 2725.9.1]

- **Emerging Risks/Issues:**

None

- **Estimated Completion Date:** December 30, 2008

- **Proposed Revisions to the Project Plan:**

Recommend this action be integrated with the Arc Flash or Institutional Electrical Safety Plan and this lone action be closed.

## WBS 6.5 Authority Having Jurisdiction (AHJ) Nationally Recognized Testing Laboratory (NRTL) Action Plan

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Activity Status – **R** Scope **R** Cost **R** Schedule

### ■ Progress/Description of Work Completed – 33%

- Plan addressing AHJ review and approval of legacy equipment received from Collider-Accelerator Department
- Draft project plan for Plant Engineering is in review.
- Inventory for Balance of Plant was completed
- Safety and Health Services Division (SHSD) will coordinate inspection of high risk articles for Basic Energy Sciences (BES).
- EEI Qualification Program is being developed
- Classroom training for an 22 additional inspections was conducted. Practical on the job training and LESC approval required before qualification
- Database of inspected equipment will help with inspection of commercial-off-the-shelf equipment. Contract with consultant is with PPM.
  - Priority is inspection of BNL built, BNL specified, and BNL modified by end of FY07.

## WBS 6.5 Authority Having Jurisdiction (AHJ) Nationally Recognized Testing Laboratory (NRTL) Action Plan (Cont's)

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### ■ Emerging Risks/Issues:

- Electrical equipment inspection progress is slow
  - At least one year behind schedule
- A site-wide inventory of electrical equipment requiring inspection has not yet been completed  
Inventory for Balance of Plant (Other than PE, C-AD, and NSLS) to be completed end of this month
- Estimate for completion by Sept '09 will require at least 5 FTE per year for 2 years
  - Fine Print – CAP states only low risk equipment will remain to be inspected at the end of FY2007
    - *It is very unlikely we can make this*
  - Progress at end of CY2006: ~50,000 pieces of equipment to be inspected; 1,900 pieces inspected and approved (~4% complete)
  - Potential 10CFR851 noncompliance for NRTL


### ■ Estimated Completion Date: September 30, 2009

### ■ Proposed Revisions to the Project Plan:

- Once the activity to Integrate BNL Electrical Corrective Action Plans this activity should be closed and tracked to closure through the integrated plan.

## WBS 6.6 Inadequate Control of Procedures (ATS 2935)

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Activity Status –  Scope  Cost  Schedule

■ **Progress/Description of Work Completed – 95%**

- The draft verification and validation plan for the Internal Control Document subject area implementation was developed and forwarded to Subject Matter Experts (SMEs) for review and comment.
- The last activity- Effectiveness review of PAAA corrective actions is scheduled for completion in 1<sup>st</sup> quarter FY08.

■ **Emerging Risks/Issues:**

None

■ **Estimated Completion Date:** December 1, 2007

■ **Proposed Revisions to the Project Plan:**

None

# Brookhaven National Laboratory

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ISM/Safety Improvement  
Project Review Meeting

## **WBS 7.0 ISM Recommendations and Improvement Initiatives**

March 29, 2007

# WBS 7.0 ISM Recommendations and Improvement Initiatives

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WBS Summary Status –  Scope  Cost  Schedule

- Overall 92% of recommendations and opportunities for improvement from the FY 06 Evaluation of ISM are complete.
- Nuclear Safety Management/Authorization continues to be a concern and emerging issue (Potentially Inadequate Safety Analysis [PISA] at the WMF), Authorization Basis Documentation maintenance.
  - Potential for Price Anderson Amendment Act (PAAA) enforcement

## WBS 7.1.5 Conduct of Operations Evaluation and Implementation

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Activity Status –  Scope  Cost  Schedule

### ■ Progress/Description of Work Completed – 93%

- IA&O completed effectiveness reviews of corrective actions from the August 2003 IA&O assessment. Those reviews were:
  - Phase 1 - Conduct of Operations Program implementation
  - Phase 2 – Central Steam Facility, Chill Water Facility, Waste Management Facility
- Corrective Action Plans are being developed (they will be entered & tracked in Institutional ATS to closure)

### ■ Emerging Risks/Issues:

- Methods/Requirements for institutional management of Con Ops

### ■ Estimated Completion Date: March 16, 2007

### ■ Proposed Revisions to the Project Plan:

The IA&O Assessment is being performed in three stages and additional time is required to complete this deliverable. Proposed date April 20, 2007



## WBS 7.1.6 Nuclear Safety Authorization / Readiness

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Activity Status –      **R** Scope      **R** Cost      **Y** Schedule

■ **Progress/Description of Work Completed – 93%**

- Natural Phenomena Hazard Design Draft Document for the Waste Management Facility review by plant engineering to independent validate seismic/design calculations was completed.
- The Deputy Director for Operations charged the ESH&Q ALD with the assessment of Facility Safety Management authorization basis documents for Nuclear, Radiological, Accelerator, and industrial facilities. A third party team was assembled, and scheduled to complete this review by May 15, 2007.

■ **Emerging Risks/Issues:**

- Methods/requirements for institutional document control of facility authorization bases for nuclear and former nuclear facilities.
- Institutional nuclear safety management

■ **Estimated Completion Date:** June 1, 2007

■ **Proposed Revisions to the Project Plan:**

None

## WBS 7.1.8 Construction Safety Subject Area Review / Update

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Activity Status –      **G** Scope      **G** Cost      **G** Schedule

■ **Progress/Description of Work Completed – 100%**

- Construction Safety subject area revisions/updates are complete. Construction inspection list and health and safety plan template was updated to include radiation sources (ionizing and non-ionizing). Reconciled Plant Engineering procedure requirements and subject area construction inspection responsibilities.

■ **Emerging Risks/Issues:**

- None

■ **Estimated Completion Date:** Completed February 28, 2007

■ **Proposed Revisions to the Project Plan:**

None

## WBS 7.2.1 Worker Safety and Health Rule Implementation

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Activity Status – **G** Scope **Y** Cost **G** Schedule

- Progress/Description of Work Completed – 87%
  - A corrective action plan is being developed to address the gaps
  - WSH Program Description & Gap Analyses were forwarded to DOE-BHSO for review and approval
  - 95% Primary and 65% Parsed Record of Decision analyses completed
- Emerging Risks/Issues:
  - Incremental cost need to address gaps
  - Corrective action plans for non-compliances, Institutional gaps: Electrical & Pressure Safety, Fire Protection
- Estimated Completion Date:
  - Corrective action plan due to DOE-BHSO for review and approval – April 30, 2007
- Proposed Revisions to the Project Plan:

None

## WBS 7.3.4 Employee Concerns Program Evaluation


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Activity Status –  Scope  Cost  Schedule

- **Progress/Description of Work Completed – 40%**
  - Argonne and Stanford Linear Accelerator Center (SLAC) reports were reviewed to gain a better understanding of Employee Concern Program Findings. A review of BNL ECP against the findings is in progress. Recommendations from this review will be communicated to the Human Resource department and Deputy Director for Operations
- **Emerging Risks/Issues:**  
None
- **Estimated Completion Date:** April 10, 2007
- **Proposed Revisions to the Project Plan:**  
None

## WBS 7.3.6 Electronic Delivery of Experimental Safety Review Form Evaluation

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Activity Status –  Scope  Cost  Schedule

- **Progress/Description of Work Completed – 60%**

- Collaboration efforts with Oak Ridge National Lab (ORNL) is underway. A demonstration of the ORNL electronic experimental safety review process was provided to BNL staff. Preliminary analysis indicates that the ORNL system is not as robust as the system BNL has in place. Experimental Safety Review Coordinators are developing an Electronic ESR for use at BNL. The team has met on several occasions in an effort to improve safety review processes.

- **Emerging Risks/Issues:**

None

- **Estimated Completion Date:** April 10, 2007

- **Proposed Revisions to the Project Plan:**

None

## WBS 7.3.7 Effectiveness of Off-Site ISM

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Activity Status –  Scope  Cost  Schedule

- Progress/Description of Work Completed – 0%
  - Performance/completion of this activity is contingent upon incremental funding and institutional priorities. [Will follow up with the DDO and ESH&Q ALD]
  - Need to establish the scope of work for this activity.
- Emerging Risks/Issues:  
None
- Estimated Completion Date: August 1, 2007
- Proposed Revisions to the Project Plan:  
It is anticipated that the ISM Project/Safety Improvement project will receive the incremental funding necessary to complete this deliverable. Update the deliverable to reflect a due date August 1, 2007